The

Loan Arranger

Spring 2006

Revolving Loan and Operator Certification Section Environmental Science and Services Division

Michigan Department of Environmental Quality

SRF Doors Open to Nonpoint Source Projects By Edwyna McKee

A milestone in the eighteen years of the State Revolving Fund (SRF) administration occurred on March 30, 2006: The first State Revolving Fund (SRF) nonpoint source project was awarded a loan. The Malletts Creek Drainage District in Washtenaw County received a \$2.18 million dollar low-interest loan to build a 3-tiered storm water detention pond system on Malletts Creek. The site is located in Brown Park, east of Stone School Road in the city of Ann Arbor. The proposed system incorporates approximately 4 acres of extended detention area and wetland. The complete system has been designed to capture the 4 to 4.5 feet of flooding expected on this site approximately three times annually.



The photo above was taken from the existing weir, looking south, toward the proposed detention/wetland area of the project. The three terraced pools will be constructed in the area shown on the right side of the photo and further right, out of photo range.

From a historical perspective, in the 1970's, the Brown Park pond site was excavated and a weir put in place to slow the sudden, large volumes of stream flow which occurred following storm events. Although initially the original design functioned as a brake on the 'flashy' flows and as a sediment collector, in the thirty intervening years, the excavated site has become filled with sediment and no longer provides enough assistance to meet the water quality needs of area waterways.

The proposed project was designed to address several storm water parameters, which contribute to the degradation of water quality, not only in Malletts Creek, but downstream in the Huron River and Ford Lake. The overland flows entering Malletts Creek upstream of the project will first flow through the three progressively lower level tiers or pools, with overflow channeled to the extended wetland for a detention period of up to 48 hours. The extended detention wetland is designed to provide approximately 15 million gallons of capture volume. Dewatering of the system to the pre-event levels will be accomplished by directing detention area flows over the new weir.

At the design flow level, the completed project is expected to remove 62 percent of the incoming total suspended solids and 34 percent of the incoming phosphorus. In addition, the project is designed to provide improvements in the temperature and the nature of the flows. Deep pools are expected to reduce the insolation heating that normally occurs at this site. Also, the existing 'flashy flows' are expected to be significantly reduced; this reduction translates into less adverse impact on aquatic life and habitat. Finally, the new weir not only regulates flow volume, but also oxygenates the flow before it heads downstream.

The final stages of the project include planting of native species throughout the extended detention and wetland areas. The overarching goal of the selection process was to build a diverse habitat for wildlife. Plant species were also chosen for their abilities to tolerate varying degrees of periodic inundation. The deepest portions of the extended detention and wetland area will sustain 4 to 4.5 feet of flooding several times each year; native cattails

will be settled into such areas. The higher, upland areas will be planted with Brown Fox Sedge, Tussocks Sedge, Wool Grass, the familiar wetfooted Joe-Pye Weed (see photo at right) and other species that tolerate a predominantly moist soil regime with occasional inundation.



Project construction is scheduled to begin early this summer. Maintenance of the project is critical to its success as a water quality improvement project, requiring efforts to remove invasive species such as Reed Canary Grass or the Purple Loosestrife, which can be lethal to native plant species.

The SRF Loan of \$2.18 million and Clean Michigan Initiative grants totaling \$1.5 million have been awarded to the Malletts Creek Drainage District to plan, design and build this nonpoint source project. This project is part of a larger watershed-wide effort to protect and improve the quality of the water bodies that are part of daily life to area residents.

LOAN COMMITMENTS

The Director of the Department of Environmental Quality, Steven E. Chester has announced fourteen new loan commitments from the revolving fund programs. The SRF and Strategic Water Quality Initiatives Fund (SWQIF) provide low-interest financing for local units of government to make needed improvements to wastewater collection and treatment facilities, while assistance from the Drinking Water Revolving Fund (DWRF) finances improvements to public drinking water systems. The thirteen loans announced today total over \$37 million.

"We continue to make unprecedented progress in protecting and enhancing Michigan's water resources," said Director Chester. "These projects not only create needed infrastructure improvements, but also stimulate construction activity and represent a real investment in Michigan's environ-

mental and economic future. I'm particularly pleased to see the SRF being accessed for a nonpoint source project for the first time."



The funded SRF/SWQIF projects include:

- A \$7,090,000 loan to the city of Adrian for improvements to its existing wastewater treatment plant (WWTP) and its Broad Street Pump Station.
- \$18,855,000 to the city of Lansing to finance another segment of the city's Long Term Combined Sewer Overflow (CSO) Control Program. Upon eventual completion, the city's 30-year effort will eliminate the discharge of raw sewage into the Grand River. To date over \$158 million in SRF assistance has been awarded to Lansing for combined sewer separation.
- A \$2,180,000 loan to the Malletts Creek Drainage District for the Brown Park Improvement Project in the city of Ann Arbor. As the first nonpoint source improvement effort to receive SRF assistance in Michigan, the project will create a wetland detention area in Malletts Creek that will dramatically reduce loadings of suspended solids and phosphorus into the Huron River.
- A loan of \$2,860,000 to Eaton County for a new sewer system and wastewater treatment facility to serve residences around Narrow Lake in Brookfield Township, permitting failed on-site systems to be taken out of service.
- Three loans totaling \$5,935,000 to the city of Port Huron for on-going work to separate its combined sewer system. To date Port Huron has received 13 loans for its sewer separation program, loans that total nearly \$52 million. These projects continue to reduce the discharge of combined sewage into the Black and St. Clair Rivers.
- A SWQIF loan of \$890,000 to the city of Ann Arbor, the third in a series of loans, for continuation of its footing drain disconnection program. The program will accomplish the removal of groundwater from the city's sanitary sewer system and help prevent sanitary sewer overflows and basement back-ups that have plagued the city.

These commitments bring SRF/SWQIF financing awarded to Michigan communities to date to over \$2.3 billion. These projects are further examples of the commitments being made by local units of government in Michigan to ensure protection of the state's valuable water resources and the public health of its citizens.



The funded DWRF projects include:

- \$2,500,000 to the city of Galesburg to construct a new elevated storage tank and replace deteriorated water mains.
- A \$345,000 loan to the village of Stockbridge for construction of improvements to its distribution system, including the replacement of water mains and the looping of dead ends to improve the quality and reliability of delivered water.
- \$1,500,000 in loan assistance to the village of Brooklyn to construct a new elevated water storage tank, improve its distribution system and upgrade its metering system.
- Three loans totaling \$3,085,000 to the city of Port Huron for its long-term water main replacement program. To date the city has received 12 loans totaling nearly \$27 million. The water main work is being done concurrent with the city's combined sewer separation program.

The improvements financed by these loans will ensure compliance with the requirements of the Safe Drinking Water Act and protect the public health of system users in these communities. Since the inception of Michigan's DWRF program in 1998, over \$387 million in assistance has been tendered.

Program interest rates remain well below open market rates, with Fiscal Year 2006 loans at 1.625 percent in the SRF/SWQIF and 2.125 percent in the DWRF.

What's a Loan Worth? By Chip Heckathorn

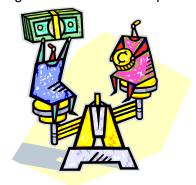
With the birth of the State Revolving Fund in 1988 and the Drinking Water Revolving Fund in 1996, and the debate that accompanied their conception, many added the term "loan" to their list of four letter words. After decades of state and federal grant

assistance, municipalities were faced with the realization that the newly arrived bundles of joy came with a coupon book. But before we throw the baby out with the bath water (or the drinking water for that matter), consider this:

The below market rate loans provided by the revolving funds act, smell, and in many ways look just like their older sibling, the grant.

Remember that virtually all state and federal programs that provide grant assistance require

some level of local match, which usually is obtained by selling municipal bonds at the prevailing market rate. The table below shows the "grant equivalent" at various SRF/DWRF/SWQIF interest rates and market interest rates.



Grant Percentage Equivalent

Market Borrowing Rate for Local Match

		4%	5%	6%	7%
SRF, DWRF or	1.0%	25%	31%	36%	41%
	1.5%	21%	27%	33%	38%
SWIQF	2.0%	17%	24%	30%	35%
Interest	2.5%	13%	20%	26%	32%
Rate	3.0%	9%	16%	23%	29%

As you can see, at current revolving fund interest rates (1.625 percent in the SRF and 2.125 in the DWRF) and a prevailing open market bond rate that is about 5 percent, a loan recipient is realizing the same financial assistance that would have been available with a grant that covered roughly 23-26 percent of its project's cost. It is evident that low revolving fund rates, coupled with elevated market rates would result in the highest grant equivalent comparison. And although these equivalencies are clearly short of the 75 percent and 55 percent funding levels available under the old Construction Grants Program, considering increased eligibility, fewer program requirements, and shorter project implementation schedules (time is money), the SRF, DWRF, and SWQIF clearly aren't the problem children they were first portrayed to be.

Michigan Municipal Bond Authority (MMBA)/Department of Environmental Quality (DEQ)

2007 FINANCING SCHEDULE for the State Revolving Fund (SRF), the Drinking Water Revolving Fund (DWRF) and the Strategic Water Quality Initiatives Fund (SWQIF)

	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
Part I of Application Due	09/06/06	11/28/06	02/23/07	05/30/07
Part II Application Due FNSI Clearance Plans & Specs Approved User Charge System Approved	09/25/06	01/03/07	04/02/07	06/22/07
Bid Ad Placed No Later Than	09/23/06	01/06/07	03/31/07	06/23/07
Part III of Application Due Bid Data Submittal	11/08/06	02/21/07	05/16/07	08/09/07
DEQ Order of Approval Issued	11/21/06	03/13/07	06/05/07	08/30/07
Borrower's Pre-Closing with the Michigan Municipal Bond Authority (MMBA)*	12/04/06	03/19/07	06/11/07	09/10/07
MMBA CLOSING	12/14/06	03/29/07	06/21/07	09/20/07

^{*}In addition to MMBA requirements, all municipal bond sales must be reviewed and approved by the Local Audit and Finance Division of the Michigan Department of Treasury.

AN APPROVABLE APPLICATION FOR A REVOLVING FUND LOAN MUST INCLUDE:

- 1. A completed revolving funds application (Parts I, II, and III) including all required application information and assurances.
- A detailed project description, cost breakdown, and project schedule.
- 3. Financial documentation to demonstrate ability for timely repayment of the loan and other assurances required by the application. (Part I)
- 4. If applicable, all executed intermunicipal service agreements. (Part II)
- 5. An approved User Charge System. (Part II)
- 6. An approved Project Plan. (Part II)
- 7. A set of plans and specifications suitable for bidding, including DEQ construction permit. (Part II)
- 8. A certified resolution from the applicant designating an authorized representative. (Part II)
- 9. Verification that the project has been advertised for bids or other appropriate procurement action. (Part II)

Deadline for Submission of
Project Plans for the Fiscal Year 2007 Project
Priority Lists
for the
State Revolving Fund/Strategic Water Quality
Initiatives Fund- Project Plans must be received OR postmarked no later than
July 1, 2006.

MAKING TRACKS

This early February the Revolving Loan and Operator Certification Section (RLOCS) welcomed three new staff into our fold!

Cindy Clendenon previously spent seventeen years in federal and state scientific government agencies: namely, the National Oceanic and Atmospheric Administration and the Indiana Departments of Natural Resources and Environmental Management. Her job duties entailed water re-

sources, fisheries, weather communication, and solid waste data analysis and planning. Cindy also worked four years as a project editor for Michigan-headquartered Thom-

son Gale, a major publisher in the library reference market. Some of her editorial projects included student-level illustrated encyclopedias on mathematics and water sciences. Cindy holds a Master of Science degree in Environmental Science (Water Resources Concentration) from Indiana University.



Kelly Hoffman holds a Bachelors of Science degree from Grand Valley State University in Natural Resource Management. She has volunteered a great deal of time to nongovernmental organizations, working on numerous projects including habitat

management and water quality improvement. Prior to completing her degree, Kelly worked as an Air Traffic Controller in the U.S. Air Force stationed at Langley Air Force Base, VA. Most recently, she was employed as a veterinary technician at an animal emergency hospital. Kelly greatly enjoys working with the public and is now looking forward

to assisting communities in their efforts to obtain financial assistance through the revolving funds.

Benjamin Skarp earned his Bachelor of Science degree in Resource Development from Michigan State University, as well as a Master of Arts degree in Geography from Western Michigan University, prior to joining RLOCS. He has managed a Tribal Wildlife Grant, administered by the U.S. Fisheries and Wildlife Service, for the Nottawaseppi Huron Band of Pottawatomie in Fulton, Michigan, and was instrumental in establishing a variety of tribal environmental programs. Such programs included

implementation of an invasive plant species management program; construction and management of tribal а greenhouse; a native plant revegetation program throughout the Reservation; and creation of a Wildlife Habitat Assessment and Restoration

Program. Prior to his employment with the tribe, he taught Physical Geography at Western Michigan University for two years as well as served as a network administrator for a technical consulting firm based in Sussex, WI. His graduate work included writing a feasibility study to implement a Michigan Heritage Water Trail along portions of Pine Creek and the Nottawa Creek in Calhoun County, Michigan. He now looks forward to applying his experience to the SRF, DWRF and SWQIF programs.

We at RLOCS are very lucky and happy to have Cindy, Kelly, and Ben join us and look forward to having them work with us in the years to come!

Public Hearing Dates for the Fiscal Year 2007 Intended Use Plans, and Project Priority Lists for the

Drinking Water Revolving Fund-August 23, 2006 State Revolving Fund/Strategic Water Quality Initiatives Fund–September 27, 2006



If you know someone, who would like to be added to *The Loan Arranger* mailing list, or have an address change, please e-mail the editor, Mrs. Deana M. Kinney, at Kinneydm@michigan.gov

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ENVIRONMENTAL SCIENCE AND SERVICES DIVISION MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY PO BOX 30457 LANSING MI 48909-7957

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Jennifer M. Granholm, Governor
Michigan Department of Environmental Quality
Steven E. Chester, Director
Environmental Science and Services Division
Amy A. Butler, Chief
REVOLVING LOAN AND OPERATOR CERTIFICATION SECTION
Chip Heckathorn, Section Chief
Dave Krusik, Project Management Unit – East Chief
Wendy Jansma, Project Management Unit – West Chief
Sonya Butler, Technical Support Unit Chief

INTERNET: www.michigan.gov/deq

The Loan Arranger is published tri-annually by the Revolving Loan and Operator Certification Section.

Correspondence may be addressed to The Loan Arranger Editor:

Eric Way, Operator Training and Certification Unit Chief Telephone: 517-373-2161 Fax: 517-335-0743

REVOLVING LOAN AND OPERATOR CERTIFICATION SECTION
ENVIRONMENTAL SCIENCE AND SERVICES DIVISION
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
PO BOX 30457
LANSING MI 48909-7957



